

ABSTRACT

The present inventors isolated and purified elicitor-binding proteins in good yield by combining the development of a column that uses APEA derivatives, pre-columns to remove
5 non-specifically adsorbing substances, and effective elution methods. Using the N-terminal and internal chain amino acid sequences of the obtained proteins, the present inventors successfully isolated cDNAs encoding the proteins of the present invention from a rice cDNA library. Moreover, when anti-Con A-CEBiP antibodies were purified and their effect on elicitor-responsive reactive oxygen production was examined, production of reactive oxygen was
10 inhibited by a pretreatment with the antibodies, suggesting that the present proteins are receptor proteins involved in chitin oligosaccharide elicitor responses. Since these elicitors induce resistance to blast in rice, the proteins of the present invention can be applied to the development of novel disease control technologies.